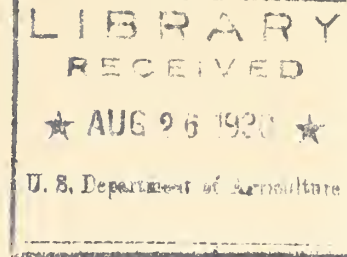


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U. S. Department of Agriculture
Weather Bureau
Instrument Division

INSTRUCTIONS REGARDING OBSERVER'S SIGNAL CLOCK.

In an effort to meet the need for a mechanical reminder to assist airport observers in the many observations required a signal clock has been designed and constructed in the Instrument Division of the Central Office specifically for the purpose indicated.

The clock proper, a Seth Thomas No. 10, 8-day movement, well known for ruggedness of construction, has had the customary hands removed and a brass disc wheel about $2\frac{1}{2}$ inches in diameter placed upon the arbor usually occupied by the minute hand. This wheel has 12 screw sockets equally spaced about its circumference, and since the wheel makes a complete turn in one hour it will be apparent upon examination that if screws were inserted in all the sockets a contact would be made every five minutes. Of course no one wants such a result and in operation only the screws necessary to accomplish the number of desired contacts are to be inserted. Several extra screws are provided in a rack attached to the door. The contact maker is the standard one-sixtieth mile contact from the anemometer, chosen in the interest of subsequent servicing.

Some effort was directed to retaining the clock hands but no practicable method appeared that did not involve troublesome complications.

The brass disc may be rotated by hand without injury to the clock, just as the hand is set. Operating current should be kept to the minimum to minimize sparking. A condenser across the terminals is an additional aid in this respect.

No buzzer nor battery are being supplied since these are frequently available or may easily be procured locally.

It is not to be expected that this type of clock will equal a pendulum clock as a time keeper.

B. C. Kadel,
Chief of Division.

Washington, D. C.
August 9, 1930.

